

Gatwick Route 4 Redesign of RNAV SIDs

Design Options – Focus Group 1 Minutes



GATWICK AIRPORT LIMITED, DESTINATIONS PLACE, GATWICK AIRPORT, WEST SUSSEX, RH6 ONP

Registered in England 1991018. Registered Office Destinations Place, Gatwick Airport, West Sussex, RH6 ONP

www.gatwickairport.com

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2019



Document Details

Reference	Description
Document Title	Gatwick Route 4 Redesign of RNAV SIDs
	Design Options – Focus Group 1 Minutes
Document Ref	71248 45
Issue	Issue 1
Date	18 th November 2019
Client Name	GAL
Classification	

Issue	Amendment	Date

Approval Level	Authority	Name
Author		
Reviewer		

Focus Group 1 - Minutes

Project Title	London Gatwick Route 4 Redesign of RNAV SIDs
Client	Gatwick Airport Limited (GAL)
Purpose of Meeting	Design Options Focus Group 1
Date of Meeting	30 October 2019
Held at	Goodwood Suite, Hilton Hotel, South Terminal, Gatwick Airport
Present	(GAL) – (GAL) – (ANS) – (Osprey CSL) – (Osprey CSL) – (Osprey CSL) – (Waverley Borough Council) (Waverley Borough Council) (Brockham Parish Council) (Horley Town Council) – (GACC) (CAGNE) – (Mole Valley District Council) – (Easyjet) – (Salfords and Sidlow Parish Council) – (Newdigate Parish Council) – (Plane Justice) – (Betchworth Parish Council) – (NPAS) (Plane Wrong) – (Heathrow Airport) (Heathrow Airport) (Capel Parish Council) – (Tandridge District Council) – (Surrey County Council) – (Route 4 No More) – (Mole Valley District Council) – (Plane Justice) (Reigate & Banstead Borough Council)
Copies to	GAL
Osprey Reference	71248 45
Issue	Issue 1

Meeting Summary

Item	Action
<p>Opening Introductions</p> <p>– Stated that redacted slides from the presentation will be circulated tomorrow to attendees. Recipients agreed not to onward distribute the slides as, without the context of today’s discussion, they could be misunderstood. Slides and Minutes of the meeting will be published on the CAA portal.</p> <p>– Invited attendees to contribute both today and, if they wish, in writing by 8 November 2019 to the GAL Rte 4 e-mail address. stated that that might not give sufficient time to discuss the focus groups’ discussions with District and Parish Councils, replied that attendees should take this as an opportunity to provide instant feedback and that any subsequent feedback from District and Parish Council discussions would be welcome too.</p>	<p>All</p>
<p>Presentation and Discussion</p> <p>– Stated that she was frustrated that this process is being taken in isolation. She would like the totality of noise to be taken into account, not just Rte 4 noise. replied that this ACP was Rte 4 and the challenge it would be to include everyone outside of that process. stated that it is unsafe and unsound and that we (CAGNE) would not support it. said that this focus group is part of a wider engagement plan and, later in the process, a full public consultation will be undertaken in line with CAP 1616.</p> <p>A discussion took place between and regarding the start date of the NPRs and when the original routes commenced.</p> <p>asked about routes in and out of Heathrow and FASI-S. explained the aims of FASI-S. explained that this ACP had devised a suite of objectives that recognised the importance of creating a design that was compatible with the objectives of FASI-South.</p> <p>stated that this is a fresh ACP, not a continuance of the 2012 RNAV replication ACP. asked what affects will the Judicial Review (JR) outcomes have upon this ACP. replied that the JR will inform this ACP but confirmed that this Route 4 ACP has been started afresh.</p> <p>explained the CAP 1616 process and timeline including an explanation of the AIRAC cycle. asked whether the future Rte 4 implementation would be subject to the 28-day or 56-day cycle. and confirmed it should be 56 days.</p> <p>asked for confirmation that it would take roughly 1 year from CAA decision to implementation of the new Rte 4. Potential timescales were discussed. He also asked if the solution offered, at submission point, to the CAA would be ‘one route’ or ‘two or three routes’ from which the CAA would choose. As part of the CAP 1616 process, the ACP sponsor will put forward its proposal for approval to the CAA. and asked to</p>	

Item	Action
<p>see if the rest of the presentation covered his question. <There was no subsequent discussion on this.></p> <p>felt that the Design Principles contradicted earlier discarded Design Principles apropos NPRs. With regards to Rtes 3 and 4, he was concerned that the Design Principle of 'the same residents suffering aircraft noise from both Route 3 and Route 4 departures' had also been discarded.</p> <p>questioned the respite view, countered this. They disagreed.</p> <p>questioned the description of the 2012 date as historic and a discussion ensued about the definition of 'historic'. Consensus was not achieved.</p> <p>and debated NPRs, their usefulness, whether they are anachronistic, fair, in need of update. Consensus was not achieved.</p> <p>asked about future housing developments under Rte 4. answered that under CAP 1616 analysis, future housing considerations are taken into consideration and used the example that noise analysis has to consider noise levels today, at implementation and in 10-years' time. It was discussed that local authority plans and future developments should be provided to inform this work.</p> <p>stated that it is ludicrous that aircraft are still at 4000ft North of Horley. explained the current airspace constraints and stated that they will remain extant for the Rte 4 ACP. FASI-S might improve this, but it cannot be guaranteed.</p> <p>asked whether the population affected includes any transient population, for example at the AONB (Surrey Hills). stated that avoiding an AONB is one of the Design Principles.</p> <p>The Comprehensive List of Unsupported options was discussed. It was explained that they are not totally off the table and attendees were invited to comment further if they wished. Option A attracted a comment, by that it was <i>de facto</i> Rte 9. It was explained that they were similar but had different end points. Rte 4 routes via SUNAV whereas Rte 9 does not.</p> <p>stated that if we go south, there will be more noise for residents already affected by Rtes 1, 7 and 8. She stated that those people should be in this room.</p> <p>stated if you live under an NPR, you have to accept noise.</p>	
<p>Design Options</p> <p>Option 0 – asked whether the NPR sits within the swathe.</p> <p>Option 1 – attracted comments, from and that it looks like Rte 3.</p>	

Item	Action
<p>and stated that the slides (and options therein) are unclear to the man in the street. repeated that at public consultation these routes will be displayed with greater clarity, by using Ordnance Survey maps, for a non-aviation audience. Attendees would be invited to point out their particular points of interest.</p> <p>asked whether accelerating altitudes should be incorporated. stated that climbing, due to differing climb rates, equals noise below 7000ft.</p> <p>Option 2 – raised a broader point about ATC instructions taking aircraft off the SIDs via speed, turn or climb. explained that we are designing the SID via SUNAV and that there are tactical reasons, commonly after aircraft have left the NPR vertical constraint, and reasons of safety, that ATC take aircraft off the SID.</p> <p>offered attendees the opportunity to mix elements of the Options if they wish in their feedback.</p> <p>asked what is the difference between dispersion, respite and relief. gave an explanation. It was discussed that previous Rte 4 focus groups stated that they wanted dispersion but not respite.</p> <p>Option 5 – 190kts, flying slower, flying dirtier, therefore noisier. did not like this option.</p> <p>Option 6 – preferred dispersion further towards SUNAV. IW asked how do you know who will fly which waypoints. answered that multiple waypoints could be spread across fleets. To instigate this across the various airlines would take further work by GAL. asked about the concentration of traffic in the track-to-fix option.</p> <p>Option 7 – concentration of traffic. and concurred that they didn't like this option.</p> <p>asked about the noise effect of the options. replied that that analysis would be further developed for Stages 3A and 3B (the Consult Gateway) of the ACP. also asked, under FASI-S, what altitudes are achievable on these options. answered that CCO to above 7000 feet was the aim.</p>	
<p>Conclusion</p> <p>and thanked attendees for their attendance and contribution at today's Design Options Focus Group 1. informed the group that an invitation would be sent, in due course, for the subsequent Design Options Focus Group proposed to be held at the end of November 2019.</p>	

Summary of Actions

Action	Description	Status	Owner(s)	Due Date
1	– Stated that redacted slides from the presentation will be circulated tomorrow to attendees.	Done		
2	– Invited attendees to contribute both today and, if they wish, in writing by 8 November 2019 to the GAL Rte 4 e-mail address.	Done	All	
3	- Informed the group that an invitation would be sent, in due course, for the subsequent Design Options Focus Group 2.	Done		

Gatwick Route 4 Redesign of RNAV SIDs

Design Options – Focus Group 2 Minutes



GATWICK AIRPORT LIMITED, DESTINATIONS PLACE, GATWICK AIRPORT, WEST SUSSEX, RH6 ONP
Registered in England 1991018. Registered Office Destinations Place, Gatwick Airport, West Sussex, RH6 ONP

www.gatwickairport.com

This document is of UK origin and has been prepared by Osprey Consulting Services Limited (Osprey) and, subject to any existing rights of third parties, Osprey is the owner of the copyright therein. The document is furnished in confidence under existing laws, regulations and agreements covering the release of data. This document contains proprietary information of Osprey and the contents or any part thereof shall not be copied or disclosed to any third party without Osprey's prior written consent.

© Osprey Consulting Services Limited 2019



Document Details

Reference	Description
Document Title	Gatwick Route 4 Redesign of RNAV SIDs
	Design Options – Focus Group 2 Minutes
Document Ref	71248 48
Issue	Issue 1
Date	21st November 2019
Client Name	GAL
Classification	

Issue	Amendment	Date

Approval Level	Authority	Name
Author		
Reviewer		

Focus Group 2 - Minutes

Project Title	London Gatwick Route 4 Redesign of RNAV SIDs
Client	Gatwick Airport Limited (GAL)
Purpose of Meeting	Design Options Focus Group 2
Date of Meeting	21 November 2019
Held at	Kempton Suite, Hilton Hotel, South Terminal, Gatwick Airport
Present	(GAL) – (GAL) – (ANS) – (Osprey CSL) – (Osprey CSL) – (Osprey CSL) – (Osprey CSL) – (Osprey CSL) – (Osprey CSL) – (Waverley Borough Council) (GATCOM) (Brockham Parish Council) (Horley Town Council) – (GACC) - (CAGNE) – (Mole Valley District Council) – (Salfords and Sidlow Parish Council) – (Newdigate Parish Council) – (Plane Justice) – (Betchworth Parish Council) – (Plane Wrong) – (Leigh Parish Council) - (Heathrow Airport) - (Tandridge District Council) – (Surrey County Council) – (Route 4 No More) – (Mole Valley District Council) – (Plane Justice) – (Crawley Borough Council) – (Reigate & Banstead Borough Council) - (Reigate & Banstead Borough Council) (Outwood Parish Council) – (Quiet Outwood) – (Quiet Outwood) -
Copies to	GAL
Osprey Reference	71248 48
Issue	Issue 1

Meeting Summary

Item	Action
<p>Opening Introductions</p> <p>– Welcomed all attendees, including some new ones, to the second Design Options Focus Group. added his welcome and introduced the facilitators for today’s sessions. He explained that the Focus Group would be split into two sessions, he outlined the scope of each. The first would be a recap and reminder of the options, the second would be an open plenary session where attendees would be invited to comment upon designs and options. In addition, he stated that a redacted version of the PowerPoint slides from today’s focus group would be e-mailed to attendees. He asked recipients to respect the context, that readers of the slides would need, in order to be fully informed by their content.</p> <p>– Invited attendees to ask questions, contribute and bear in mind that conflicting views may occur during the discussions.</p>	<p>All</p>
<p>Presentation and Discussion</p> <p>explained the objectives of the Rte 4 airspace change, re-capped the CAP 1616 Stage 2 workstreams and reminded attendees what was covered at the first Design Options Focus Group.</p> <p>gave an explanation of terms including; design envelope, performance-based navigation (PBN) routes, noise preferential route (NPR), swathe, and design options. asked if the existing NPRs would be displayed on the maps (to be used in Session 2), replied no. The discussion ensued about NPRs, referred to the Airspace Modernisation Group and this Focus Groups differing understanding of the NPRs.</p> <p>asked about Rtes 3 and 4 overlapping. He stated that, as a Design Principle, the Rte 3 and 4 overlap was not taken forward because it would entail moving the NPR. continued that now that GAL are stating that the NPR could be moved, if the design option selection necessitated, that the earlier discarded DP 27 (Design Principles Report dated 13 September 2019 page 18 para 3.3.11 refers) should be reinstated. Otherwise, the process is being disingenuous. also asked whether the NPR would be moved. suggested that the NPR might have to move.</p> <p>stated that it was ‘totally unacceptable’ to have not consulted with other potentially affected communities, she stated that CAGNE does not agree with this process. replied that this Focus Group was engagement and that consultation would occur later in the process.</p> <p>asked if all the design options fell within the NPR conformance swathe. replied that the options are not dictated by the NPR and that, if necessary, GAL would make an application to the DfT to change the NPR.</p> <p>asked what takes priority, Rte 4 or FASI-S? replied that Rte 4 would plug into FASI-S. asked about FASI-S non-inclusion of NPRs in their ACP, replied that FASI-S would provide a systemized ATC structure. asked about the climb gradients for the SIDs, replied</p>	

Item	Action
<p>that they would be step-climb gradients under this ACP. asked who was designing the options, replied that were.</p> <p>asked about dispersal apropos PBN-aircraft and their ability to accurately follow each other. He was informed that the design options cater for that.</p> <p>and requested that GIS data be provided for their use when internally consulting within their respective councils. They were informed that, out of context, the data could be mis-construed. They countered that the GIS data would aid their decision making. Subsequent to this discussion, it was agreed, by GAL that Osprey would provide the requested data.</p>	
<p>Design Options</p> <p>presented Options 0 – 7 to the Focus Group.</p> <p>Option 1 – questioned why Option 1 is being considered when it is outside the NPR conformance swathe. He repeated his earlier point about the process being disingenuous. asked if Option 1 was the route that was discounted. stated that Option 1 had been a published route, LAM1X. asked how an aircraft flies a fly-by route, explained.</p> <p>Option 2 – explained the removal of the kink to SUNAV.</p> <p>Option 3 – explained the apparent dispersal.</p> <p>Option 4 – asked about the north-westerly point of the swathe being outside the NPR conformance swathe. (and others) reiterated that they wanted to compare all the options against the NPR. replied that the options, including Option 0, offer alternatives based upon the design principles. asked which option was closest to the conventional route, answered that it was a mix, but Option 4 was the closest.</p> <p>Option 5 – asked why there are two 90 degree turns rather than one 190 (sic) degree turn at 190kts. answered that it was designed to ensure that an aircraft has fully rolled out of the first turn before commencing the second turn iaw PANS Ops Doc 8168, disagreed.</p> <p>Option 6 - explained the apparent dispersal in the turn. asked if the re-joining waypoint could occur further down the route, he was answered yes. asked what the difference is, in kms, between the left and right arcs of the route, he was informed that this would be shown on the maps in session 2.</p> <p>Option 7 – explained the option.</p> <p>asked how many of the options would go further following today, he was answered that it would depend upon feedback and subsequent evaluation.</p>	

Item	Action
<p>asked if dispersion is possible with PBN aircraft, she was answered yes.</p> <p>stated that noise data would be useful for options comparison. explained that that would occur during Stage 3 of the ACP. replied that he was aware.</p>	
<p>Map table, Displays and Plenary Discussion</p> <p>The second session of the Focus Group enabled attendees to analyse the separate design options which were individually displayed on boards around the room. Additionally, a 1:50,000 OS map was placed onto a separate table over which the eight options were accurately displayed using acetate overlays. Attendees had the opportunity to compare each and every route and found the presentation of the routes most helpful. Attendees were invited to write and draw on the maps and overlays citing places of interest. Furthermore, attendees were provided feedback sheets to offer their opinions on each option.</p> <p>A collection of comments was taken in the plenary discussion:</p> <p>does not like Option 7 but does like Option 3. does not like Option 7.</p> <p>A number of attendees questioned why the 4000ft design constraint remains extant. and stated that Option 7 could be good. and re-stated, whilst observing Option 1, that the discarded design principle (DP27), of the cumulative effect of Rte 3 and Rte 4 should be taken forward. stated that Option 7 could be improved by adding apparent dispersion round the turn and downwind. He also offered the opinion that dispersion was psychologically better when aircraft were out of sight even though they may only be a few dB less. marked 'The Weald School' in Beare Green, plus some churches, on the design option maps as she was concerned about the proximity of the tracks over these specific places. She also marked out a future 400-house development and a 160-caravan site. marked Leigh School, Leigh plus East Surrey Hospital, Redhill as places of interest on the Option 1 design map.</p>	<p>All</p>
<p>Conclusion</p> <p>and thanked the attendees for their participation at the Focus Group.</p>	

Summary of Actions

Action	Description	Status	Owner(s)	Due Date
1	– to provide GIS data to the Local Planning Officers.	Done		
2	– stated that redacted slides from the presentation will be circulated to attendees.	Done		
3	– invited attendees to contribute both today and, if they wish, in writing by 13 December 2019 to the GAL Rte 4 e-mail address.	Open		

